

BEFORE THE BOARD OF ENVIRONMENTAL REVIEW
OF THE STATE OF MONTANA

In the matter of the)	NOTICE OF PUBLIC HEARING ON PROPOSED
adoption of new rules I)	ADOPTION AND AMENDMENT
through X pertaining to)	
water use classifications)	
and numeric nutrient)	
standards; and the)	
amendment of ARM)	
17.30.602 and 17.30.619)	
pertaining to definitions and)	
incorporations by reference)	(WATER QUALITY)

TO: All Concerned Persons

1. On May 13, 2002 at 10:00 a.m., the Board of Environmental Review proposes to hold a public hearing in Room 111 of the Metcalf Building, 1520 East Sixth Avenue, Helena, Montana, to consider the proposed adoption and amendment of the above-stated rules.

2. The Board will make reasonable accommodations for persons with disabilities who wish to participate in this hearing or need an alternative accessible format of this notice. If you require an accommodation, contact the Board no later than 5:00 p.m., May 1, 2002, to advise us of the nature of the accommodation that you need. Please contact the Board Secretary at P.O. Box 200901, Helena, Montana, 59620-0901; phone (406) 444-2544; fax (406) 444-4386 or email "ber@state.mt.us".

3. The proposed new rules provide as follows:

**RULE I WATER-USE CLASSIFICATIONS AND DESCRIPTIONS -
CONSTRUCTED DITCHES, SEASONAL AND SEMI-PERMANENT LAKES AND
EPHEMERAL STREAMS** (1) The water-use classifications for waters in constructed irrigation ditches and drain ditches that have return flows to state waters and the water-use classification for waters in ephemeral streams and seasonal and semi-permanent lakes and ponds are as follows:

(a) waters in constructed irrigation and drain ditches that contain controlled flows of surface water and are de-watered during the non-irrigation season.....D-1;

(b) waters in constructed irrigation and drain ditches that contain controlled flows of surface water mixed with ground water and are periodically de-watered.....D-2;

- (c) ephemeral streams including ephemeral streams with flows that are periodically augmented by discharges from point sources.....E-1;
- (d) ephemeral streams with flows that are augmented by continuous discharges from point sources.....E-2;
- (e) seasonal lakes and ponds.....E-3;
- (f) semi-permanent lakes and ponds, not including reservoirs, that have an electrical conductivity (EC) less than 7,000 mS/cm.....E-4;
- (g) semi-permanent lakes and ponds, not including reservoirs, that seasonally have an electrical conductivity (EC) equal to or greater than 7,000 mS/cm.....E-5;
- (h) streams with low or sporadic flow that, because of natural hydro-geomorphic and hydrologic conditions, are not able to support fish.....F-1;

(2) This rule does not classify any water body. Prior to a specific water body being classified in ARM 17.30.607 through 17.30.614 under one of the water-use classifications identified in (1)(a) through (h) and before the U.S. Environmental Protection Agency's approval of the water body's revised classification, a use attainability analysis must be conducted in accordance with 40 CFR 131.10(g), (h) and (j).

AUTH: 75-5-301, MCA

IMP: 75-5-301, MCA

RULE II D-1 CLASSIFICATION STANDARDS (1) Waters classified D-1 are to be maintained suitable for agricultural purposes and secondary contact recreation.

(2) No person may violate the following specific water quality standards for waters classified D-1:

- (a) the standards in WQB-7 for carcinogens and parameters with a bioconcentration factor greater than 300 apply;
- (b) the water quality shall be maintained of sufficient quality that all designated uses of any downstream receiving waters will be fully maintained;
- (c) when the daily maximum water temperature is greater than 60 degrees F, no permitted discharge(s) may cause the geometric mean number of organisms of the fecal coliform group to exceed 1000 per 100 ml and ten percent of the samples during any 30-day period may not exceed 2000 fecal coliforms per 100 ml.

(3) The narrative standards in ARM 17.30.637(1)(d) and (2) that pertain to aquatic life do not apply.

AUTH: 75-5-301, MCA

IMP: 75-5-301, MCA

RULE III D-2 CLASSIFICATION STANDARDS (1) Waters classified D-2 are to be maintained suitable for agricultural purposes and secondary contact recreation. Because of conditions resulting from flow regulation, maintenance of the ditch or geomorphological and riparian habitat conditions, the quality of these waters is marginally suitable for aquatic life.

(2) No person may violate the following specific water quality standards for waters classified D-2:

(a) the acute aquatic life standards in WQB-7 apply, except for the ammonia standards, which do not apply;

(b) the standards in WQB-7 for carcinogens and parameters with a bioconcentration factor greater than 300 apply;

(c) the water quality shall be maintained of sufficient quality that all designated uses of any downstream receiving waters will be fully maintained;

(d) when the daily maximum water temperature is greater than 60 degrees F, no permitted discharge may cause the geometric mean number of organisms of the fecal coliform group to exceed 1000 per 100 ml and ten percent of the samples during any 30-day period may not exceed 2000 fecal coliforms per 100 ml.

(3) The narrative standards in ARM 17.30.637(1)(d) and (2) that pertain to aquatic life do not apply.

AUTH: 75-5-301, MCA

IMP: 75-5-301, MCA

RULE IV E-1 CLASSIFICATION STANDARDS (1) Waters classified E-1 are to be maintained suitable for agricultural purposes, secondary contact recreation and wildlife.

(2) No person may violate the following specific water quality standards for waters classified E-1:

(a) the standards in WQB-7 for carcinogens and parameters with a bioconcentration factor greater than 300 apply;

(b) when the natural water quality exceeds the standards in WQB-7 identified in (a), the natural water quality may not be made worse;

(c) the water quality shall be maintained of sufficient quality that all designated uses of any downstream receiving waters will be fully maintained;

(d) when the daily maximum water temperature is greater than 60 degrees F, no permitted discharge(s) may cause the geometric mean number of organisms of the fecal coliform group to exceed 1000 per 100 ml and ten percent of the samples during any 30-day period may not exceed 2000 fecal coliforms per 100 ml.

(3) The narrative standards in ARM 17.30.637(1)(d) and (2) that pertain to aquatic life do not apply.

AUTH: 75-5-301, MCA

IMP: 75-5-301, MCA

RULE V E-2 CLASSIFICATION STANDARDS (1) Waters classified E-2 are to be maintained suitable for agricultural purposes, secondary contact recreation, and wildlife. Because of habitat, low flow, hydro-geomorphic and other physical conditions these waters are marginally suitable for aquatic life.

(2) No person may violate the following specific water quality standards for waters classified E-2:

(a) the acute aquatic life standards in WQB-7 apply, except for the ammonia standards, which do not apply;

(b) the standards in WQB-7 for carcinogens and parameters with a bioconcentration factor greater than 300 apply;

(c) when the natural water quality exceeds the standards in WQB-7 identified in (2)(a) and (b), the natural water quality may not be made worse;

(d) the water quality shall be maintained of sufficient quality that all designated uses of any downstream receiving waters will be fully maintained;

(e) when the daily maximum water temperature is greater than 60 degrees F, no permitted discharge(s) may cause the geometric mean number of organisms of the fecal coliform group to exceed 1000 per 100 ml and ten percent of the samples during any 30-day period may not exceed 2000 fecal coliforms per 100ml.

(3) The narrative standards in ARM 17.30.637(1)(d) and (2) that pertain to aquatic life do not apply.

AUTH: 75-5-301, MCA

IMP: 75-5-301, MCA

RULE VI E-3 CLASSIFICATION STANDARDS (1) Waters classified E-3 are to be maintained suitable for agricultural purposes, secondary contact recreation, and wildlife.

(2) No person may violate the following specific water quality standards for waters classified E-3:

(a) the standards in WQB-7 for carcinogens and parameters with a bioconcentration factor greater than 300 apply;

(b) when the natural water quality exceeds the standards in WQB-7 identified in (2)(a), the natural water quality may not be made worse;

(c) when the daily maximum water temperature is greater than 60 degrees F, no permitted discharge(s) may cause the geometric mean number of organisms of the fecal coliform group to exceed 1000 per 100 ml and ten percent of the samples during any 30-day period may not exceed 2000 fecal coliforms per 100ml;

(d) the water quality shall be maintained of sufficient quality that all designated uses of any downstream receiving waters will be fully maintained.

(3) The narrative standards in ARM 17.30.637(1)(d) and (2) that pertain to aquatic life do not apply.

AUTH: 75-5-301, MCA

IMP: 75-5-301, MCA

RULE VII E-4 CLASSIFICATION STANDARDS (1) Waters classified E-4 are to be maintained suitable for aquatic life, agricultural purposes, secondary contact recreation, and wildlife.

(2) No person may violate the following specific water quality standards for waters classified E-4:

(a) the acute and chronic aquatic life standards in WQB-7 apply;

(b) the standards in WQB-7 for carcinogens and parameters with a bioconcentration factor greater than 300 apply;

(c) when the natural water quality exceeds the standards in WQB-7 identified in (2)(a) and (b), the natural water quality may not be made worse;

(d) the water quality shall be maintained of sufficient quality that all designated uses of any downstream receiving waters will be fully maintained;

(e) when the daily maximum water temperature is greater than 60 degrees F, no permitted discharge(s) may cause the geometric mean number of organisms of the fecal coliform group to exceed 1000 per 100 ml and ten percent of the samples during any 30-day period may not exceed 2000 fecal coliforms per 100 ml.

AUTH: 75-5-301, MCA

IMP: 75-5-301, MCA

RULE VIII E-5 CLASSIFICATION STANDARDS (1) Waters classified E-5 are to be maintained suitable agricultural purposes, secondary contact recreation, and wildlife.

(2) No person may violate the following specific water quality standards for waters classified E-5:

(a) the standards in WQB-7 for carcinogens and parameters with a bioconcentration factor greater than 300 apply;

(b) when the natural water quality exceeds the standards in WQB-7 identified in (2)(a), the natural water quality may not be made worse;

(c) the water quality shall be maintained of sufficient quality that all designated uses of any downstream receiving waters will be fully maintained;

(d) when the daily maximum water temperature is greater than 60 degrees F, no permitted discharge(s) may cause the geometric mean number of organisms of the fecal coliform group to exceed 1000 per 100 ml and ten percent of the samples during any 30-day period may not exceed 2000 fecal coliforms per 100 ml.

(3) The narrative standards in ARM 17.30.637(1)(d) and (2) that pertain to aquatic life do not apply.

AUTH: 75-5-301, MCA

IMP: 75-5-301, MCA

RULE IX F-1 CLASSIFICATIONS STANDARDS (1) Waters Classified F-1 are to be maintained suitable for secondary contact recreation, wildlife and aquatic life not including fish.

(2) No person may violate the following specific water quality standards for waters classified F-1:

- (a) the acute aquatic life standards in WQB-7 apply, except for the ammonia standards, which do not apply;
 - (b) the standards in WQB-7 for carcinogens and parameters with a bioconcentration factor greater than 300 apply;
 - (c) when the natural water quality exceeds the standards in WQB-7 identified in (2)(a) and (b), the natural water quality may not be made worse;
 - (d) the water quality shall be maintained of sufficient quality that all designated uses of any downstream receiving water will be fully maintained;
 - (e) when the daily maximum water temperature is greater than 60 degrees F no permitted discharge(s) may cause the geometric mean number of organisms of the fecal coliform group to exceed 1000 per 100 ml and ten percent of the samples during any 30-day period may not exceed 2000 fecal coliforms per 100ml.
- (3) The narrative standards in ARM 17.30.637(1)(d) and (2) that pertain to aquatic life do not apply.

AUTH: 75-5-301, MCA

IMP: 75-5-301, MCA

REASON: The Board is proposing the adoption of new rules I through IX in response to its statutory mandate to create water-use classifications for waters with low or sporadic flow that do not support salmonid or nonsalmonid fish. See 75-5-301(1), MCA. The adoption of new rules I through IX is necessary because existing rules classify all state surface waters as capable of supporting all of the "fishable/ swimmable" uses promoted under the federal Clean Water Act (CWA) even though some of these waters do not support these uses due to periodic de-watering or sporadic flows. As a result of the current classification system, point source discharges to surface waters that are not capable of supporting all of their designated uses are required to meet water quality standards intended to protect uses that do not exist. In order to eliminate the imposition of unnecessarily stringent water quality standards in waters that are not capable of supporting a fishery or drinking water supplies, the Board is proposing to adopt water-use classifications and water quality standards that protect a limited number of beneficial uses for constructed ditches, ephemeral streams, seasonal and semi-permanent ponds and lakes, and sporadic flow streams. The approach taken by the Board includes various types of surface waters that are not capable of supporting all of the "fishable/swimmable" uses promoted under the CWA. The Board is not proposing to adopt a single classification for all of these waters, because there are differences in the beneficial uses supported by these waters that warrant different water quality standards.

RULE X NUMERIC NUTRIENT STANDARDS (1) No person may violate the numeric water quality standards identified below.

(2) The numeric nutrient and standing crop of benthic algae water quality standards for the mainstem Clark Fork River from below the Warm Springs Creek confluence (N46o 11' 17", W112o 46' 03") to the confluence with the Flathead River (N47o 21' 45", W114o 46' 43") are as follows:

(a) In the mainstem Clark Fork River from below the Warm Springs Creek confluence (N46o 11' 17", W112o 46' 03") to the Reserve Street Bridge in Missoula, MT (N46o 52' 52", W114o 02' 21") the numeric water quality standards for Total Nitrogen, Total Phosphorus, and benthic algal chlorophyll a, applicable from June 21 to September 21, are as follows:

(i) Parameter Concentration

Total Phosphorus as P 20 µg/L

Total Nitrogen as N 300 µg/L

(ii) Parameter Density

(Summer mean) - Benthic 100 mg/square meter

algal chlorophyll a

(Maximum) - Benthic 150 mg/square meter

algal chlorophyll a

(b) In the Clark Fork River from the Reserve Street Bridge in Missoula, MT (N46o 52' 52", W114o 02' 21") to the confluence with the Flathead River (N47o 21' 45", W114o 46' 43") the numeric water quality standards for Total Nitrogen, Total Phosphorus, and benthic algal chlorophyll a, applicable from June 21 to September 21, are as follows:

(i) Parameter Concentration

Total Phosphorus as P 39 µg/L

Total Nitrogen as N 300 µg/L

(ii) Parameter Density

(Summer mean) - Benthic 100 mg/square meter

algal chlorophyll a

(Maximum) - Benthic 150 mg/square meter

algal chlorophyll a

AUTH: 75-5-301, MCA

IMP: 75-5-301, MCA

REASON: The Board is proposing the adoption of new rule X in order to establish numeric water quality standards for nutrients and standing crop of benthic algae in portions of the Clark Fork River. The adoption of new rule X is necessary to provide a uniform method of determining permit limits on the Clark Fork that is consistent with the in-stream nutrient targets approved by EPA as a TMDL for four point sources on the Clark Fork under the Voluntary Nutrient Reduction Program (VNRP). Under existing rules, nutrient limits for other point source discharges that are not subject to the VNRP/TMDL nutrient limits are established on a case-by-case basis using a narrative standard prohibiting "undesirable aquatic life." The adoption of the proposed numeric standards will eliminate any potential conflicts between the in-stream targets established for four point sources under the VNRP/TMDL and permit limits for other point source discharges to the Clark Fork. Alternatively, the Board is not adopting numeric values that are more or less stringent than the in-stream targets of the VNRP/TMDL, because that would unfairly place the burden of reducing and maintaining nutrient levels in the Clark Fork on the permittees that would be subject to the more stringent nutrient targets of the VNRP.

4. The rules proposed to be amended provide as follows, stricken matter interlined, new matter underlined:

17.30.602 DEFINITIONS In this subchapter the following terms have the meanings indicated below and are supplemental to the definitions given in 75-5-103, MCA:

- (1) "Acutely toxic conditions" means conditions lethal to aquatic organisms passing through the mixing zone. Lethality is a function of the magnitude of pollutant concentrations and the duration of organism exposure to those concentrations.
- (2) "Bioconcentrating parameters" means the parameters listed in department Circular WQB-7 which have a bioconcentration factor greater than 300.
- (3) "Carcinogenic parameters" means the parameters categorized as carcinogens in department Circular WQB-7.

(4) "Chlorophyll a" means the mass of chlorophyll a pigment after correction for phaeophytins.

(4) through (19) remain the same, but are renumbered (5) through (20).

(21) "Phaeophytins" means the degradation products of chlorophyll.

(20) and (21) remain the same, but are numbered (22) and (23).

(24) "Seasonal lake or pond" means a natural depression in the land surface that periodically holds water from precipitation or snow and ice melt in the immediate watershed.

(25) "Secondary contact recreation" means activities in or on the water where the potential for immersion or ingestion of water is low, such as wading or boating.

(22) remains the same, but is renumbered (26).

(27) "Semi-permanent lake or pond" means a natural depression in the land surface, not including reservoirs, that receives groundwater in addition to precipitation runoff from the immediate watershed, and occasionally goes dry.

(23) through (26) remain the same, but are renumbered (28) through (31).

(32) "Total nitrogen" means the total nitrogen concentration (as N) of unfiltered water. This may be determined by direct methods, or derived as the sum of the soluble (as N) and non-soluble (as N) nitrogen fractions.

(33) "Total phosphorus" means the total phosphorus concentration (as P) of unfiltered water.

(27) through (29) remain the same, but are renumbered (34) through (36).

(37) "Use attainability analysis" means a scientific assessment and analysis of the factors affecting the attainment of a use(s). Information that may be used include chemical, physical and biological data, as well as photo documentation and comparison to reference conditions, that are of sufficient detail to accurately portray the level and potential level of use support of a waterbody. The use attainability analysis is required by the United States EPA according to CFR 131.10(g), (h) and (j).

(38) "WQB-7" means the department circular that is adopted and incorporated by reference in ARM 17.30.619 and is entitled "Montana Numeric Water Quality Standards." This circular establishes water quality standards for toxic, carcinogenic, bioconcentration, nutrient, radioactive and harmful parameters.

(30) and (31) remain the same, but are renumbered (39) and (40).

AUTH: 75-5-201, 75-5-301, MCA

IMP: 75-5-301, MCA

The amendment of 17.30.602 is necessary in order to define the parameters for which numeric standards are being adopted in new rule X and to define terms used in new rules I through IX, which include: "WQB-7", "seasonal lake or pond", "secondary contact recreation", "semi-permanent lake or pond", and "use attainability analysis." Defining the parameters for which numeric standards are being adopted is necessary because the standards will vary depending upon the precise definition of these parameters. Alternatively, the Board has decided not to leave these terms undefined, as that may result in the inconsistent application of the numeric standards. Defining "WQB-7" is necessary to inform the reader that the term refers to a document listing Montana's numeric water quality standards. In addition, defining the terms "seasonal lake or pond", "secondary contact recreation", "semi-permanent lake or pond" and "use attainability analysis" is necessary because those terms have a specific meaning in the context of water quality regulations and programs. The Board has rejected the alternative of not adopting these definitions because without them the rules would be unclear and subject to various interpretations.

17.30.619 INCORPORATION BY REFERENCE (1) through (1)(f) remain the same.

(g) 40 CFR 131.10(g), (h) and (j) (2000), which establishes criteria and guidelines for conducting a use attainability analysis.

(2) remains the same.

AUTH: 75-5-201, 75-5-301, MCA

IMP: 75-5-301, MCA

REASON: Prior to classifying any water under the water use classifications, EPA requires a use attainability analysis for the removal of a beneficial use. EPA has authority, under the Clean Water Act, to approve or disapprove a state's reclassification of waters.

5. Concerned persons may submit their data, views or arguments, either orally or in writing, at the hearing. Written data, views or arguments may also be submitted to the Board of Environmental Review, P.O. Box 200901, Helena, Montana, 59620-0901, faxed to (406) 444-4386 or emailed to the Board Secretary at "ber@state.mt.us" and must be

received no later than 5:00 p.m., May 20, 2002. To be guaranteed consideration, the comments must be postmarked on or before that date.

6. [Name], attorney for the Board, has been designated to preside over and conduct the hearing.

7. The Board maintains a list of interested persons who wish to receive notices of rulemaking actions proposed by this agency. Persons who wish to have their name added to the list shall make a written request that includes the name and mailing address of the person to receive notices and specifies that the person wishes to receive notices regarding: air quality; hazardous waste/waste oil; asbestos control; water/wastewater treatment plant operator certification; solid waste; junk vehicles; infectious waste; public water supplies; public sewage systems regulation; hard rock (metal) mine reclamation; major facility siting; opencut mine reclamation; strip mine reclamation; subdivisions; renewable energy grants/loans; wastewater treatment or safe drinking water revolving grants and loans; water quality; CECRA, underground/above ground storage tanks; MEPA; or general procedural rules other than MEPA. Such written request may be mailed or delivered to the Board of Environmental Review, 1520 E. Sixth Ave., P.O. Box 200901, Helena, Montana 59620-0901, faxed to the office at (406) 444-4386, emailed to the Board Secretary at "ber@state.mt.us" or may be made by completing a request form at any rules hearing held by the Board.

8. The bill sponsor notice requirements of 2-4-302, MCA, do not apply.

BOARD OF ENVIRONMENTAL REVIEW

By:

JOSEPH W. RUSSELL, M.P.H.,
Chairperson

Reviewed by:

JOHN F. NORTH, Rule Reviewer

Certified to the Secretary of State, [date].